

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

HAMMOND DEVELOPMENT
INTERNATIONAL, INC.

Plaintiff,

v.

AMAZON.COM, INC.,
AMAZON.COM LLC,
AMAZON.COM SERVICES, INC.
AND
AMAZON WEB SERVICES, INC.

Defendants.

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CIVIL ACTION No. 6:19-cv-00355-ADA

JURY TRIAL DEMANDED

[LEAD CASE]

HAMMOND DEVELOPMENT
INTERNATIONAL, INC.

Plaintiff,

v.

GOOGLE LLC

Defendant.

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CIVIL ACTION No. 6:19-cv-00356-ADA

JURY TRIAL DEMANDED

DEFENDANT GOOGLE LLC'S OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Google LLC (“Google”) proposes constructions for the disputed terms that are supported by the intrinsic record, including the claim language, specification, and express definitions and disclaimers Hammond Development International, Inc. (“HDI”) made to the U.S. Patent Office (“USPTO”) during the prosecution of the Asserted Patents. Google’s constructions are also consistent with arguments that HDI made in the past two months in its Patent Owner Preliminary Responses (“POPRs”) to Google’s petitions for *inter partes* review (“IPR”), where HDI argued for narrower claim scope to avoid prior art.

Contrary to its representations to the USPTO during prosecution and again in its POPRs, HDI now proposes that most of the disputed terms require no construction. Judging from its infringement contentions, HDI intends to apply the claims broadly for infringement, but in ways that encompass prior art features that HDI distinguished. HDI cannot have it both ways—applying narrow interpretations to avoid prior art at the USPTO while arguing for no construction or broader constructions before this Court to support its infringement contentions. Google therefore respectfully requests that the Court adopt Google’s constructions to bring the scope of the Asserted Patents in line with the scope that HDI represented as proper in the prosecution history, IPR proceedings, and other intrinsic evidence.

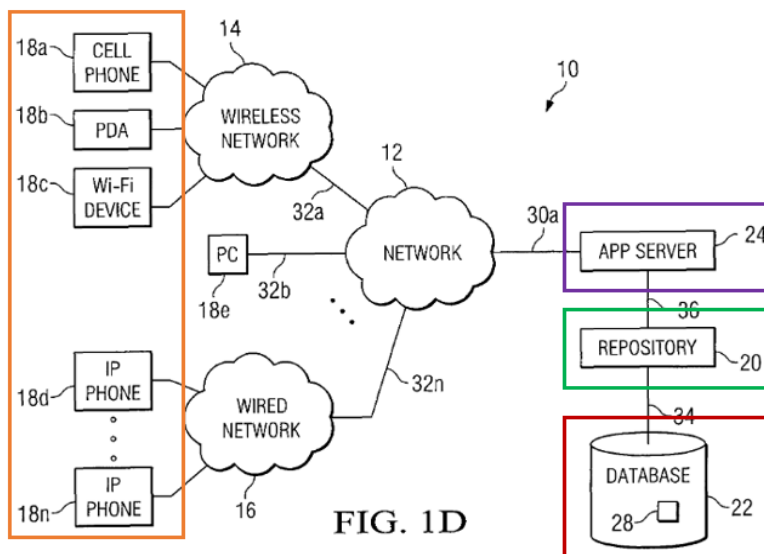
II. PATENT BACKGROUND

HDI filed this lawsuit against Google and Amazon.com, Inc., Amazon.com LLC, Amazon.com Services, Inc., and Amazon Web Services, Inc. (collectively, “Amazon”) asserting eight related patents, U.S. Patent Nos. 9,264,483 (“’483 Patent”), 9,420,011 (“’011 Patent”), 9,456,040 (“’040 Patent”), 9,705,937 (“’937 Patent”), 9,716,732 (“’732 Patent”), 10,193,935 (“’935 Patent”), 10,264,032 (“’032 Patent”), and 10,270,816 (“’816 Patent”) (collectively, the “Asserted Patents”). *See* Case No. 6:19-cv-00356-ADA, Dkt. 1; Case No. 6:19-cv-00355-ADA,

Dkt. 1. The Asserted Patents are all titled “Method and System for Enabling a Communication Device to Remotely Execute an Application” and all share the same specification. HDI asserts 60 claims of the Asserted Patents against both Defendants. Case No. 6:19-cv-00355-ADA, Dkt. 50.

A. Asserted Patents

The Asserted Patents describe a communication system that uses distributed computing to provide information to a user. As shown in annotated Figure 1D below, the system uses four elements—a communication device, an application server, a repository, and a database—to execute an application to collect information from and/or present information to a user. Ex. G1 at Fig. 1D.¹ In Figure 1D, a user’s **communication device** (elements 18a–n) sends a request for communication session to an **application server** (element 24). *Id.* at 1:35–38. To respond to the request, the application server requests an application from the **repository** (element 20). *Id.* at 1:42–53. The repository retrieves the application from a **database** (element 22) and sends the application to the application server. *Id.* The application server then executes the application to establish the requested communication session with the communication device to collect information from and/or present information to the user. *Id.* at 1:53–57.



¹ All eight Asserted Patents share the same specification. For ease of reference, the specification cites in this brief refer to the '483 Patent specification.

In one example, a user requests to check his bank account balance. *Id.* at 9:6–45. The **application server** obtains and executes the appropriate application to begin a dialog with the user, asks for the account number, and finds and sends the bank account balance to the user. *Id.*

B. Prosecution History, Including Recent IPRs

During prosecution of the earliest-filed Asserted Patent, the '483 Patent, HDI and the Examiner disputed the requirements of the “application server,” including in an appeal to the PTAB. Before the Examiner and the PTAB, HDI repeatedly argued that the '483 Patent was allowable because the claims require “an ‘application server’ that:

- receives an application in a communication sent over a communication link from at least one repository;
- communicates a request for processing service to the at least one communication device, . . . wherein the request for processing service comprises one or more queries for information from a user;
- executes the identified application remote from the communication device; and
- establishes the communication session with the communication device.”

Ex. G9 at 175. In light of these arguments, the PTAB overruled the Examiner’s rejections, and the '483 Patent issued. *Id.* at 220, 228.

The other seven Asserted Patents are continuations of the '483 Patent that issued shortly after their applications were filed. In all seven continuation patents, the Examiner cited back to the original '483 prosecution history as the reason for allowance. *See* Ex. G10 at 255, Ex. G11 at 290, Ex. G13 at 201, 206; *see also* Ex. G12 at 200, Ex. G14 at 260, Ex. G15 at 231, 234, Ex. G16 at 239 (allowing the patents because the prior art references “fail to anticipate or render obvious the claim limitation that the PTAB reversed the Examiner on”).

After HDI filed this lawsuit, Google filed IPRs challenging the validity of the Asserted Patents. To date, HDI has filed three POPRs, arguing that the '483, '032, and '816 Patents are distinguishable over the prior art because: (1) the claimed system uses communication devices that can handle “request(s) for processing,” whereas the prior art system communication devices only

play audio prompts and listen to users (Ex. G18 at 4, Ex. G20 at 6, Ex. G23 at 6); and (2) in the claimed system the application server “establish[es] the communication session,” whereas in the prior art, the communication device calls the application server (Ex. G18 at 35, Ex. G20 at 41, Ex. G23 at 38). HDI’s POPRs for the ’032 and ’816 Patents presented the same arguments as its POPR for the ’483 Patent and highlighted the ’483 Patent prosecution history as “directly relevant” to, and “incorporated into,” the ’032 and ’816 Patents. Ex. G20 at 9–10, Ex. G23 at 9–10.

III. LEGAL STANDARDS

Claim terms are generally presumed to have their plain and ordinary meaning because “the words of the claims . . . define the scope of the patented invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). Claims must be read in view of the specification, which “is the single best guide to the meaning of a disputed term.” *Id.* at 1315.

Limitations on claim scope “may be inferred from clear limiting descriptions of the invention in the specification or prosecution history.” *Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330 (Fed. Cir. 2012). The prosecution history of a patent extends to IPR proceedings where patent owners make arguments that notify the public of the scope and meaning of the claims. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1360–62 (Fed. Cir. 2017). Arguments made in IPR proceedings are thus part of the intrinsic record of the patent owner’s interpretation of claim terms and scope that the patent owner disclaimed. *Id.*

Terms should be construed consistently across related patents. *Advanced Cardiovascular Sys., Inc. v. Medtronic Vascular, Inc.*, 182 F. App’x 994, 998–99 (Fed. Cir. 2006). “When multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation.” *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999).

IV. ARGUMENTS

1. “application”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
No construction necessary.	“code that interacts directly with the communication device to facilitate collecting information from and/or presenting information to one or more clients or users of a communication device”	All asserted claims <u>except</u> ’032 Patent Cls. 16, 20, 22, 23

Google’s construction follows from HDI’s definition of “application” in the specification, with two clarifications based on the specification and prosecution history that an “application”: (1) is “code” and (2) “interacts directly with the communication device.” HDI’s proposal disregards its own lexicography and could be improperly applied to encompass mere data or information.

a) Google’s Construction Comes From The Specification Definition

The specification explicitly defines “application,” stating “[a]s used throughout this document, the term ‘application’ refers to functionality that is capable of facilitating the ability to collect information from and/or present information to one or more clients 18 or users of system 10.” Ex. G1 at 4:24–28. When the specification reveals a “special definition given to a claim term by the patentee,” “the inventor’s lexicography governs.” *Sinorgchem Co., Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007) (citing *Phillips*, 415 F.3d at 1316). That a term is set off by quotation marks is “a strong indication that what follows is a definition.” *Id.* Because HDI acted as a lexicographer to define “application,” that definition should be adopted here, and it forms the majority of Google’s proposed definition.

b) “Application” In The Asserted Patents Is A Type Of Code

Google proposes clarifying that the word “functionality” in the specification definition refers to “code.” HDI does not dispute that an “application” is a type of “code.” Ex. G24 at 2. As used in the specification and claims, “application” is something that is “executed” and sent to the application server “for execution.” *See, e.g.*, Ex. G1 at 1:7–10 (“This disclosure relates . . . to a

method and system that enables a communication device to remotely execute an application.”), 4:17–20, Cls. 1, 10, 22; Ex. G2, Cl. 1. For instance, the patented system comprises “one or more application servers adapted to execute an application . . .” and the patented method comprises “executing an application.” *Id.* at 2:4–7, 2:18–20. Clarifying that “application” is a type of “code” ensures that HDI does not later improperly argue that “application” can encompass any information or data, which would not be functionality that is capable of doing anything.

c) “Interacts Directly With The Communication Device” Is Supported By The Patent Claims, Specification, And A Prosecution History Disclaimer By the Patentee

Based on HDI’s own statements to the USPTO, “application” is code that must interact *directly* with the communication device. During the prosecution of the ’935 Patent, HDI argued that the prior art cited by the Examiner did not disclose the “application” of the claims because “[n]o direct interaction between the client device and the application occurs in Shaw, instead all interactions are controlled by the bootstrap applet and the webtop.” Ex. G14 at 249 (emphasis added). Based on HDI’s representation that the claimed application must have *direct interaction* with the client device, the Examiner issued a Notice of Allowance. *Id.* at 259.

HDI’s clear disavowal of claim scope affects the scope of “application” in not only the ’935 Patent, but in all of the Asserted Patents. As the Federal Circuit held in *Microsoft Corp. v. Multi-Tech Sys., Inc.*, statements by a patentee in prosecution of a sibling patent are a “representation of [the patentee’s] own understanding of the inventions disclosed” in all related patents. 357 F.3d 1340, 1349–50 (Fed. Cir. 2004). Applying this proposition, the Federal Circuit found that a prosecution history statement made in a continuation application filed after the issuance of the disputed patent affected the scope of claims in the parent patent. *Id.*; see also *Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990) (finding the prosecution histories of two continuation patents relevant to understanding a term in both patents).

The specification and claims of the Asserted Patents further support that an “application” is code that “interacts directly with the communication device.” In one embodiment, “application server 24 executes a Voice XML-based application that enables application server 24 to interact with and collect information from client 18a.” Ex. G1 at 6:27–29. The patent describes that the application server “interacts with the user of client 18a by requesting that the user of client 18a respond to a series of queries associated with application 28.” *Id.* at 6:49–51. Several claims also recite that the application server will “execute an application to establish a communication session with [a] communication device.” *See, e.g.,* Ex. G1, Cl. 10; Ex. G3, Cl. 1. All of these embodiments describe the “application” as code that “interacts directly with the communication device.”

The clarification that an “application” must “interact[] directly with the communication device” is important to exclude operating system or firmware code that resides on the “application server” but that does not interact with the communication device. None of the embodiments or claims describe an “application” as operating system or firmware-type code. Instead, the patent says that “application[s]” include VoiceXML applications, XIVR applications, HTML applications, and VML applications that cause direct interaction with the communication device, such as sending and receiving information to check bank account balances and flight status. Ex. G1 at 6:29–33, 9:6–45, 10:4–18.

d) Construction Is Necessary To Prevent Overbroad Interpretations Of “Application” As Covering Data, Information, Or Operating System-Type Code

HDI does not dispute that “application” refers to “code,” but insists no construction is needed. Ex. G24 at 2. No construction, or plain and ordinary meaning, is improper because HDI acted as a lexicographer defining “application” in the patents. Ex. G1 at 4:24–28; *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Not construing “application” is also problematic because the parties dispute whether an “application” must directly interact with

the communication device. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (“When the parties raise an actual dispute regarding the proper scope of [] claims, the court, not the jury, must resolve that dispute.”). Google’s construction should be adopted because it comports with HDI’s lexicography, and the specification, claims, and prosecution history of the Asserted Patents.

2. “application server(s)”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
No construction necessary.	“server that (1) receives an application in a communication sent over a communication link from at least one repository, (2) communicates a request for processing service to the at least one communication device, wherein the request for processing service comprises one or more queries for information from a user, (3) executes the application remote from the communication device, and (4) establishes the communication session with the communication device”	All asserted claims <u>except</u> ’483 Patent Cls. 22, 25

Google’s construction follows verbatim from the express definition that HDI repeatedly recited for “application server” during the prosecution of the ’483 Patent and is supported by the specification. HDI should not be permitted to walk away from the definition it relied on and continues to rely on to avoid prior art.

a) Google’s Construction Comes Directly From the ’483 Prosecution History

Google’s four-element construction for “application server” follows from an express definition that HDI repeatedly provided to the USPTO during prosecution of the ’483 Patent. In response to the Examiner’s rejections, HDI argued that the Examiner failed to cite prior art with an “application server” that (1) “communicates a request for processing service to [a] communication device . . . wherein the request for processing service comprises one or more queries for information from a user,” (2) receives an “application” “in a communication sent over a communication link from at least one repository,” (3) “*establishes* the communication session

with the communication device ” and (4) “*executes* the identified application remote from the communication device.” Ex. G9 at 144–45.

HDI reiterated these elements to the PTAB on appeal, arguing the Examiner’s rejection was “void of any analysis or explanation concerning at least an ‘application server’ that:

- receives an application in a communication sent over a communication link from at least one repository;
- communicates a request for processing service to the at least one communication device, wherein the request for processing service comprises one or more queries for information from a user;
- executes the identified application remote from the communication device; and
- establishes the communication session with the communication device.”

Id. at 175. HDI repeated these four elements, albeit in a different order, twice more in its briefs appealing the Examiner’s rejection of the ’483 Patent. *Id.* at 178, 202. Relying on HDI’s arguments, the PTAB found that the Examiner failed to cite prior art disclosing an “application server” having the four requirements that HDI enumerated. *Id.* at 218–20. The Examiner then allowed the claims because “[the prior art] fail[s] to anticipate or render obvious the claim limitation that the PTAB reversed the Examiner on.” *Id.* at 235–36 (citing limitations with “application server”). Thus, the ’483 Patent issued based on HDI’s contention that the cited prior art did not meet HDI’s specific, four-part definition of the “application server.”

b) “Application Server” Has the Same Meaning In All Of The Asserted Patents

The four-part definition of “application server” that HDI provided during prosecution of the ’483 Patent applies to the other seven Asserted Patents for several reasons. First, under Federal Circuit precedent, a term used in a family of related patents should be construed consistently across all of the related patents. Second, the seven continuation Asserted Patents issued because of the PTAB’s findings during the ’483 Patent prosecution and because HDI filed terminal disclaimers disclaiming any patent term extending beyond the expiration of the ’483 Patent. Third, HDI’s recent POPRs rely on the ’483 Patent prosecution history to argue narrowed claim scope that

avoids prior art. Fourth, the specification of the patents confirms the four requirements for “application server” that HDI enumerated to the USPTO.

i. “Application Server” Should Be Construed Consistently Across All Of The Asserted Patents

The meaning of “application server” must be the same across all of the Asserted Patents. The Federal Circuit has held, “the same claim term in the same patent or related patents carries the same construed meaning.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003). It is also well established that “the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation.” *Elkay*, 192 F.3d at 980; *see also Mark I Marketing Corp. v. R.R. Donnelley & Sons Co.*, 66 F.3d 285, 292 (Fed. Cir. 1995) (holding that a continuation patent was bound by prosecution history estoppel from the parent application). Thus, Google’s construction for “application server” should apply to every Asserted Patent.

ii. The Asserted Patents Issued From The Patent Office Because Of The “Application Server” Arguments From The ’483 Patent Prosecution History

The Examiner allowed the seven continuation Asserted Patents because he concluded that the prior art did not meet the four elements of “application server” that HDI presented in the ’483 Patent prosecution. The Notices of Allowance explicitly cite the ’483 Patent prosecution, stating that “[t]his application shares the elements of 11/779,772 that were deemed allowable following a decision by the Patent Trial and Appeal Board.” Ex. G10 at 255; *see also* Ex. G11 at 289–90 (similar); Ex. G13 at 201, 206 (same); Ex. G12 at 200, Ex. G14 at 260, Ex. G15 at 231, 234, Ex. G16 at 239 (allowing the patents because the prior art references “fail to anticipate or render obvious the claim limitation that the PTAB reversed the Examiner on”). Because it formed the basis for allowance, the four-element definition of “application server” is integral to the claimed invention.

In addition to the Examiner’s reasons for allowance, “a terminal disclaimer is a strong clue that a patent examiner and, by concession, the applicant, thought the claims in the continuation lacked a patentable distinction over the parent.” *SimpleAir, Inc. v. Google LLC*, 884 F.3d 1160, 1168 (Fed. Cir. 2018). HDI filed terminal disclaimers to overcome double-patenting rejections and to disclaim any patent term beyond the ’483 Patent for all of the continuation Asserted Patents except the ’032 Patent. Ex. G10 at 242–43, Ex. G11 at 276–77, Ex. G12 at 187–88, Ex. G13 at 187–88, Ex. G14 at 145–46, Ex. G16 at 227–28. In doing so, HDI effectively conceded that the claims of those continuation patents lack patentable distinction over the ’483 Patent claims. “Application server” in those patents thus has the same scope as it does in the ’483 Patent.

iii. HDI Admitted In Its POPRs That The ’483 Patent Prosecution History Was “Incorporated Into” Later Patents

The prosecution history of a patent extends to IPRs where patent owners make arguments that notify the public of the scope and meaning of the claims. *Aylus Networks*, 856 F.3d at 1360–62. In its three POPRs filed in response to Google’s IPRs for the ’483, ’032, and ’816 Patents, HDI describes the ’483 Patent prosecution history at length and relies on that history to distinguish the claims from prior art. For example, in its POPR addressing the ’032 patent, HDI argues that the ’483 Patent prosecution history is “helpful for a full understanding of the issues raised in [the ’032 Patent] IPR” because it is “directly relevant to [the ’032 Patent] IPR.” Ex. G20 at 9–10; *see also* Ex. G23 at 9–10 (stating the same with respect to the ’816 Patent). HDI further confirms that “the issues already addressed by the PTAB during the ’483 Patent’s extensive prosecution” are “incorporated into the prosecution of the ’032 Patent via the Examiner’s Amendment,” Ex. G20 at 10. And HDI even argues that language added to the ’032 Patent claims is correlated to the elements that were “important to the claims in the ’483 Patent in the appeal before the PTAB.” *Id.* at 20. In its POPR for the ’816 Patent, HDI points out that in the Notice of Allowance for the ’816 Patent, “[t]he Examiner also noted the claim limitation noted by the PTAB in the ’483 Patent

appeal was present in Claims 1, 14, and 20, factoring into the reasons for allowance” as proof that the ’816 Patent claims include elements “important to the claims in the ’483 Patent in the appeal before the PTAB.” Ex. G23 at 16. HDI’s POPRs also repeat its four-part definition of “application server”—“(1) communicates a request for processing service to the at least one communication device, . . . wherein the request for processing service comprises one or more queries for information from a user, (2) receives an application in a communication sent over a communication link from at least one repository, (3) executes the identified application remote from the communication device, and (4) establishes the communication session with the communication device”—as important background for the ’816, ’032, and ’483 Patents. *Id.* at 13, Ex. G20 at 15, Ex. G18 at 13.

Further, HDI’s description of an “exemplary data flow” of the claimed system includes all four requirements of its “application server” definition:

- a communication device communicates a request over a data connection to an application server to establish a communication session;
- the application server identifies an application (available via a repository over a data connection) to establish a communication session with the communication device; (*element 1*)
- the application server executes the application to establish a communication session in response to the request from the communication device; and (*elements 3 and 4*)
- the application server communicates a ‘request for processing service’ (which may include a request for user information) to the communication device. (*element 2*)

Ex. G18 at 6–7 (annotations in italics).

HDI’s recent reliance in its POPRs on the ’483 Patent file history, expressly including the four-part definition of “application server,” confirms Google’s construction for “application server” and its applicability to all of the Asserted Patents.

iv. The Specification Supports Google’s Construction Of “Application Server”

The common specification of the Asserted Patents further confirms Google’s construction and its applicability to all eight patents. The “application server” in each of the preferred

embodiments includes all four elements in Google’s construction. In the first embodiment, the specification describes that “[u]pon receipt of application 28, application server executes application 28 and begins a communication session with client 18a” (*elements 1, 2, and 4*). Ex. G1 at 6:22–24. The application server then “request[s] that the user of client 18a respond to a series of queries associated with application 28 . . . [by] communicat[ing] information relating to portions of Voice XML-based code to client 18a . . . to interact with application server 24” (*element 3*). *Id.* at 6:49–55. In the second embodiment “[a]fter receiving application 28 from database 22, repository 20 communicates application 28 and any user information to application server 24a for execution” (*element 1*). *Id.* at 8:54–56. The application server then “executes application 28 and initiates its communication session with client 18b” (*elements 2 and 4*). *Id.* at 8:57–58. The application server also delivers “commands related to application 28 and delivered via the data connection” to the client device (*element 3*). *Id.* at 8:58–65.

Google’s construction of “application server” should be adopted because it comes directly from HDI’s own prosecution history definition on which HDI relied to obtain its patents and is again relying in the IPRs. Google’s construction should apply to all of the Asserted Patents because the patents are related, share a specification, and HDI relied on the ’483 Patent prosecution history to secure allowance of the later-filed Asserted Patents.

3. “repository”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
No construction necessary.	“a computing device that retrieves an application from a database and sends the application to the application server to be executed”	All asserted claims <u>except</u> ’011 Patent Cls. 11, 16, 23

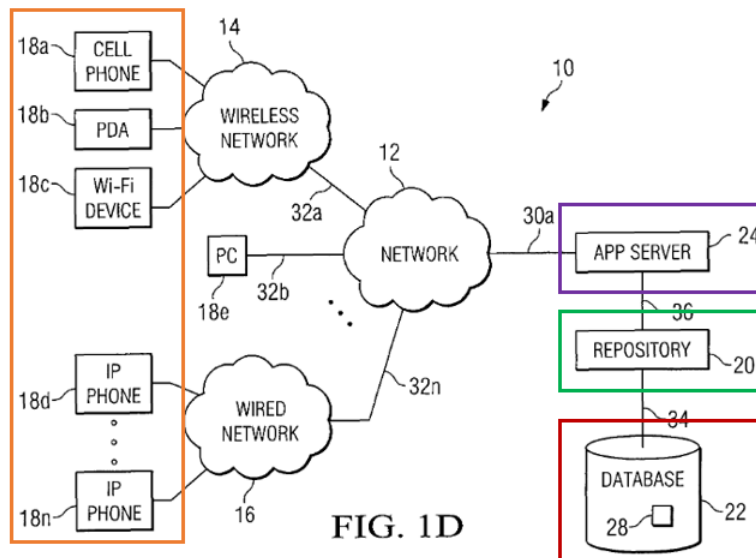
Construction of this term is necessary because, in the Asserted Patents, “repository” has particular, required functionality that is separate and distinct from mere storage. The “repository” in the patents is connected to another element, a “database,” that is storage and that specifically

stores “applications.” The “repository” retrieves “applications” from the “database,” but the “repository” does not actually execute those “applications” as that is the separate function of the “application server” discussed above.

Google’s construction accurately captures these features of the “repository” as a device that neither stores “applications” nor executes them. HDI, on the other hand, proposes no construction, leaving open the possibility of confusing the Asserted Patents’ specifically defined “repository” with a more general understanding of that word as a place to provide storage. Such interpretation is foreclosed by the intrinsic evidence as detailed below.

a) The Claims, Specification, And Prosecution History Of The Asserted Patents Support Google’s Construction

The figures of the Asserted Patents, such as Figure 1D annotated below, all depict the **repository** as a separate device from the **database**. Ex. G1 at Figs. 1A, 1B, 1C, 1D.



The specification also invariably describes the “repository” as an element that retrieves an application from a database and sends the application to the application server for execution, thus distinguishing between the three elements—**repository**, **database**, and **application server**. See, e.g., Ex. G1 at 8:54–56 (“After receiving application 28 from **database** 22, **repository** 20

communicates application 28 and any user information to **application server 24a** for execution.”), 10:4–17. The claims also confirm that the “repository” is not the same as the database, but rather “ha[s] access to” the applications in the database. *See* Ex. G1, Cls. 1, 10, 22; Ex. G2, Cl. 1; Ex. G3, Cl. 1; Ex. G4, Cls. 1, 24; Ex. G5, Cl. 1; Ex. G6, Cls. 1, 33.

The claims also recite that the “repository” and “application server” serve different functions—the “repository” retrieves and sends applications to the application server, and the “application server” executes applications. For instance, Claim 1 of the ’483 Patent recites “the at least one repository adapted to communicate the identified application over a second communication link to the at least one application server” and the “application server is adapted to execute the identified application.” Ex. G1, Cl. 1; *see also id.*, Cls. 10, 22; Ex. G2, Cl. 1; Ex. G3, Cl. 1; Ex. G4, Cls. 1, 24; Ex. G5, Cls. 1, 11, 19; Ex. G6, Cls. 1, 33. The specification also supports that the “repository” and “application server” serve these different functions. For example, the specification states that the “repository 20 using its application logic operates to identify a desired application 28 and to communicate application 28, or portions thereof, to application server 24, for execution.” Ex. G1 at 6:19–22; *see also* 4:17–20, 8:54–56 (“After receiving application 28 from database 22, repository 20 communicates application 28 and any user information to application server 24a for execution.”), 11:15–19, 11:20–25, 11:41–44.

Google’s construction is also supported by the prosecution history. During prosecution of the ’483 Patent, HDI argued that the “application server” must “receive[] an application in a communication sent over a communication link ***from at least one repository***” and “execute[] the identified application ***received from the repository*** remote from the communication device.” Ex. G9 at 202 (emphasis added). HDI reinforced that the “application server” must execute the application by arguing that a server that “merely ‘enabl[es] the execution of an identified application” does not disclose the claimed invention. *Id.* at 203. During prosecution of the ’935

Patent, HDI further reinforced this construction by arguing that the prior art did not disclose the claimed “repository” because it did not disclose “moving applications” to the application server to execute, but rather disclosed a system that selected an application server with the application already on it. Ex. G14 at 249. And in its POPR, HDI’s description of an exemplary process flow of the patents describes the “repository” as an element that sends an application to an application server for execution. Ex. G18 at 6 (“the application server identifies an application (available via a repository over a data connection) to establish a communication session with the communication device”). HDI’s prosecution history representations confirm that the “repository” retrieves and sends the application to the “application server” and the “application server” executes the application.

4. “request . . . to establish [a/the] communication session”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
No construction necessary.	“request sent before [a/the] communication session is initiated between two devices”	All asserted claims <u>except</u> ’816 Patent Cls. 20, 24, 25, 27, 28, 29

Construction of the term “request . . . to establish the communication session” is necessary to distinguish the term from “establish the communication session,” which is the next term discussed below. The intrinsic record, including the logic of the claim language, support that the “request . . . to establish the communication session” is a step that occurs before the step of “establish[ing] the communication session.” Google’s proposed construction clarifies that the “request” is separate from and precedes “establishing the communication session.” HDI proposes leaving the term undefined and opposes Google’s construction.

a) HDI’s POPRs Confirm Google’s Construction

HDI’s POPRs emphasize that the “request” for a “communication session” is a separate and earlier step that precedes the establishment of that session. *See* Ex. G18 at 8–9, 35. HDI

argues against “constru[ing] the phrases ‘establish the communication session with [the] at least one communication device’ (Claims 1, 10) and ‘establish the requested communication session over the data connection’ (Claim 22) in a way that reads out the **requirement that the application server establish a communication session over a data connection in response to a request** from the communication device.” *Id.* at 28 (emphasis added); *see also id.* at 33–34 (discussing the “requirement that the application server ‘establish’ a communication session in response to a ‘request’”), Ex. G20 at 33–35, Ex. G23 at 30–32.

HDI’s description of an “exemplary data flow” for the ’483 Patent further supports the distinction and temporal relation between the “request” and “establish” steps. Ex. G18 at 6–7. HDI explains that the “request for a communication session” by the communication device is first and is then followed by the actual establishment of that session by the application server:

- **a communication device communicates a request** over a data connection to an application server **to establish a communication session**;
- the application server identifies an application (available via a repository over a data connection) to establish a communication session with the communication device;
- **the application server executes the application to establish a communication session in response to the request from the communication device**; and
- the application server communicates a “request for processing service” (which may include a request for user information) to the communication device.

Id. (emphasis added).

b) That A “Request To Establish A Communication Session” Precedes “Establishing A Communication Session” Follows From the Ordinary Meaning Of “Request” And Is Confirmed By the Patents

The plain meaning of a “request” for an event to occur requires the “request” to come before the requested event. The patented system is no different—the “request” to “establish a communication session” precedes the establishment of the “communication session.” For example, Claim 10 of the ’483 Patent recites: “at least one of the one or more application servers adapted to execute an application **to establish a communication session** with at least one communication device coupled to the data connection **in response to a request** from the at least

one communication device *to establish the communication session.*” Ex. G1, Cl. 10 (emphasis added). Any construction that would allow a “request” to occur at the same time as or after the “communication session” is established would impermissibly read out the word “request” and contradict the plain recitations of the claims.

All of the specification’s embodiments also support that the “request” occurs before a “communication session.” The specification describes a “method for enabling one or more communication devices to remotely execute one or more applications,” comprising: (1) “communicating a request to establish a communication session,” (2) “executing an application to establish the requested communication session,” (3) remotely executing the application, and (4) “communicating a request for processing service.” Ex. G1 at 2:14–26. Notably, the first step, “communicating a request to establish a communication session” is separate from, and precedes the second step, “establish the requested communication session.” In another embodiment, the specification describes a “communication system” with a “communication device” that is “adapted to communicate a request to establish a communication session over the first communication link” and an “application server” that is “adapted to execute” an application and “to establish the communication session.” *Id.* at 1:31–62. Again here, the “request” and the establishment of a “communication session” are two discrete sequential steps, with the “request” for the “communication session” preceding the establishment of that session. That these two steps are separate and distinct is further confirmed by the fact that the “communication device” sends the “request to establish the communication session” whereas the “application server” “establish[es] the communication session.” *See, e.g., id.*, Cls. 1, 10.

HDI’s proposal of no construction should be rejected because it does not make explicit that the “request to establish the communication session” cannot occur at the same time as, or even after, “establish[ing] a communication session.” *See O2 Micro*, 521 F.3d at 1360. By contrast,

Google’s construction should be adopted as it follows the plain meaning of the word “request,” the context of the claims and specification, and HDI’s own descriptions of its claimed invention.

5. “establish [a/the/the requested] communication session”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
No construction necessary. Not indefinite.	“executing [an/the] application to initiate communication between two devices” OR Indefinite under 35 U.S.C. § 112 for failure to inform with reasonable certainty the bounds and scope of the invention	All asserted claims except '816 Patent Cl. 29

The parties dispute over this term centers on when and how the communication session is established. This term is related to the term “request . . . to establish the communication session” addressed in the previous section. The patents describe that a communication device sends a “request . . . to establish [a] communication session” to an application server, and in response, the application server executes the application to “establish a communication session.” That the communication session is established by the “application server” that executes the application was key to the issuance of the Asserted Patents and is a point that HDI argues again in its recent POPRs.

If the Court does not adopt Google’s construction, “establish a communication session” is indefinite because the intrinsic evidence fails to inform a POSA what constitutes “establish[ing] a communication session.”

a) Google’s Construction, “Executing An Application To Initiate Communication Between Two Devices,” Is Supported by the Intrinsic Record And Plain Meaning

Google’s proposed construction comprises two linked steps (1) executing the application, which causes (2) initiation of communication between two devices. This construction is supported by the specification and the prosecution history of the patents.

i. The Prosecution History Of The Asserted Patents

The prosecution history links establishing a communication session to execution of an application. Specifically, during the '483 Patent prosecution, the PTAB found that the cited prior art's disclosure of an application server sending an application to a user device for execution did not meet the "establish a communication session" limitation. Ex. G9 at 219. Instead, the PTAB found that "establish[ing] a communication session" occurred when the user device ***executed the application*** (launched the remote process) to establish a secure communication tunnel. *Id.* ("the secure connection is established by the remote process that has been received and launched by the client computing device"). The claims were allowed because the cited prior art disclosed "establish[ing] a communication session," i.e. executing an application to initiate communication, by the client device, "not by the gateway computing device the Examiner relies on to meet the claimed 'application server'." *Id.* The PTAB found this prior art disclosure did not disclose the claim requirement that the "application server is adapted to execute the identified application from the at least one communication device and to establish the communication session." *Id.*

ii. The Specification Of the Asserted Patents

The specification explains that to "establish a communication session" between the application server and communication device, the application server executes an application—the application server "is adapted to execute an application to establish the requested communication session." Ex. G1 at Abstract, 2:4–7. The specification also states that one method of the claimed invention "comprises executing an application to establish the requested communication session." *Id.* at 2:18–20. In one embodiment, "application server 24 executes a VoiceXML-based application that enables application server 24 to interact with and collect information from client 18a." *Id.* at 6:26–29. In another, "[a]pplication server 24a executes an application 28 and initiates its communication session with client 18b." *Id.* at 8:57–58.

Additionally, as described in Section IV.4, a “request . . . to establish the communication session” precedes “establish[ing] a communication session,” indicating that sending a “request” does not itself “establish a communication session.” Rather, as the specification confirms, a communication session is established when the application server executes the application.

b) HDI’s Proposal Of No Construction Leaves Ambiguity Regarding What Causes A Communication Session To Be “Establish[ed]” And The Difference Between A “Request . . . To Establish” and “Establish[ing] A Communication Session”

HDI proposes leaving “establish a communication session” undefined, which would not resolve the confusion created by the different interpretations found in its infringement allegations and in its attempts to avoid prior art. In asserting infringement, HDI’s Complaint argues that a user’s call to a Google host server system is a “request” for a communication session, not the establishment of that session, and that the Google server’s response to the call is what “establish[es] a communication session” between the two devices. Case No. 6:19-cv-00356-ADA, Dkt. 1-10 at 4. This claim mapping is directly contrary to HDI’s arguments in its POPRs where HDI argues that the same act of a “call from a user to the host system” “*is itself* the establishment of a call session.” Ex. G18 at 35, Ex. G20 at 41, Ex. G23 at 38. In a POPR filed this week, HDI argues that the application server establishes the communication session, which it claims differs from the prior art that uses a “client-side action” to establish the communication session. Ex. G23 at 39. HDI’s POPR arguments cannot be reconciled with its infringement allegations. Leaving “establish a communication session” ambiguous with no construction would leave the contradictions between these uses unresolved. *See O2 Micro*, 521 F.3d at 1360; *see also Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995) (“Claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers.”).

Google’s construction correctly defines when and how a communication session is established and should be adopted.

c) If Google’s Construction Is Not Adopted, Then “Establish A Communication Session” Is Indefinite

As demonstrated above, HDI has taken inconsistent positions regarding “establish a communication session.” Google’s proposed construction abides by the notion that claims should be interpreted to preserve their validity, if possible. But if Google’s construction is not adopted, then “establish a communication session” is indefinite because the term fails to inform with reasonable certainty what types of communication systems it covers. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014) (“a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention”). Specifically, it would be unclear whether this element covers a communication device’s calls to a back-end server. HDI’s use of this term to argue that a call from a user device to a server both does and does not “establish a communication session” shows that it would be indefinite. *Compare* Case No. 6:19-cv-00356-ADA, Dkt. 1-10 at 4 *with* Ex. G18 at 35, Ex. G20 at 41, Ex. G23 at 38.

6. **“preliminary communication session”**

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
“an initial exchange of information where the information is to be used in a future communication session”	“a communication session to obtain identifying information of a client or user for use in establishing a future communication session”	’011 Patent Cl. 16

Google’s construction for “preliminary communication session” differs from HDI’s proposal in two ways. First, a “preliminary communication session” is limited to a session that obtains “identifying information of a client or user.” Second, a “preliminary communication session” is used to collect information “for use in *establishing* a future communication session,”

rather than information that is merely “used” during a later session. Google’s construction is supported by the intrinsic record.

a) Intrinsic Evidence Supports That A Preliminary Communication Session Is Limited To Collection Of “Identifying Information Of A Client Or User”

The term “preliminary communication session” appears only once in the specification and in two claims of the Asserted Patents. Ex. G1 at 5:34–35; Ex. G2, Cl. 16; Ex. G4, Cl. 25. In all three places, the “preliminary communication session” is described as obtaining information about the user or communication device to establish another communication session. The specification states that through a “preliminary communication session,” “information regarding the target address of the client” is obtained. Ex. G1 at 5:33–37. As an example, the specification describes obtaining address information by gathering a “unique identification number of the device” or by “question and answer sequences with the user of device 18.” *Id.* at 5:37–40. Claim 16 of the ’011 Patent and Claim 25 of the ’937 Patent both recite “a preliminary communication session to acquire unique identification information about the user.” Ex. G2, Cl. 16; Ex. G4, Cl. 25. Thus, all disclosures of “preliminary communication session” support that it requires “obtain[ing] identifying information of a client or user.” HDI’s proposal that a “preliminary communication session” include the exchange of *any* information exceeds the bounds of the specification and should be rejected. *Kinetic Concepts, Inc. v. Blue Sky Medical Grp., Inc.*, 554 F.3d 1010, 1018–19 (Fed. Cir. 2009) (construing “wound” as limited to skin wounds because “[a]ll of the examples described in the specification involve skin wounds” and giving the term scope beyond skin wounds would “expand the scope of the claims far beyond anything described in the specification”).

b) A Preliminary Communication Session Collects Information “For Use In Establishing A Future Communication Session”

The intrinsic record also compels that the identification information collected in the “preliminary communication session” is “for use in *establishing* another communication session.”

See Ex. G1 at 5:33–43. For instance, the specification describes that address information collected via a “preliminary communication session,” “such as an IP address *used to establish a data connection*,” could reside on a repository and be used for the duration of the communication session. *Id.* at 5:33–48. Google’s interpretation is also supported by the ordinary meaning of the word “preliminary”—“preceding or done in preparation for something fuller or more important” (Ex. G21 at 4) or “introductory; prefatory; preparatory” (Ex. G22 at 4). That is, a “preliminary communication session” does not just occur earlier in time than a later communication session, but rather it performs actions that enable the later communication session. Had HDI intended to claim two communication sessions that merely occurred at different times, it could have claimed a “first” and “second” communication session. Because HDI claimed a “*preliminary* communication session,” the construction should include that the identification information is obtained “for use in establishing a future communication session.”

7. “request for [a] processing service” / “processing service(s)” / “provide services to an application”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
“request for [a] processing service”		
“computer code instructions to [a]/[the] processor on [a]/[the] [client device]/[communication device] for providing [a] processing service”	“request for a communication device to perform a computing process for the application that constitutes more than acting as a speaker or input device”	All asserted claims <u>except</u> ’816 Patent Cls. 20, 24, 25, 27, 29
“processing service(s)”		
“automated operation of a hardware component on [a]/[the] [communication device]/[client device]”	“a computing process performed by a communication device for the application that constitutes more than acting as a speaker or input device”	All asserted claims <u>except</u> ’816 Patent Cls. 20, 24, 25, 27, 29
“provide services to an application”		
No construction necessary.	“perform a computing process by a communication device for the application, wherein the computing process constitutes more than acting as a speaker or input device”	’011 Patent Cl. 11

Google’s constructions—which exclude a mere “speaker or input device” from the scope of the disputed terms—follow from HDI’s recent disclaimers to avoid prior art in Google’s IPRs. HDI’s POPRs argue that Google’s grounds for unpatentability should be rejected because the prior art merely shows a communication device acting like a speaker and playing audio, as opposed to receiving a “request for processing service” and performing a “processing service” as the claims require. Based on these statements, the Court should construe these terms to require a “computing process . . . that constitutes more than acting as a speaker or input device.” The other aspect of Google’s construction—that a request for processing service is performed “for the application”—frames these terms in the context of the alleged invention and is supported by the claims, specification, original prosecution histories of the patents, and HDI’s POPRs.

a) HDI’s POPRs Argue That A “Processing Service” Requires Processing That “Constitutes More Than Acting As A Speaker Or Input Device”

Google’s construction that “processing service” “constitutes more than acting as a speaker or input device” is based on explicit disclaimers HDI made in its recent POPRs. HDI argues that the claimed invention is “separate and distinct” from prior art systems that use a “dumb” telephone “with *little or no data processing capabilities whose job in the system is simply to act as a speaker and input device.*” Ex. G18 at 4, Ex. G20 at 6, Ex. G23 at 5–6. In contrast to “dumb” devices that merely allow users to “listen to voice prompts and input voice or touchtone responses,” HDI argues “the inventions of the ’483 Patent rely on a ‘smart’ device capable of executing a processing function in response to a ‘request for processing service.’” Ex. G18 at 19–21; *see also id.* at 43, 45 (arguing that playing “audio signals” to a user fails to disclose “any ‘processing service’ that happens on the client side”), Ex. G20 at 50. HDI also argues that receiving a user’s input by speech or pressing buttons does not constitute a “processing service.” Ex. G18 at 44, Ex. G20 at 51, Ex.

G23 at 45. In its most recent POPR, HDI argues that an “audio playback component” could not perform a “processing service.” Ex. G23 at 52–53.

Based on these disclaimers, Google’s constructions requiring a “computing process . . . that constitutes more than acting as a speaker or input device” follow directly from HDI’s representations to the PTAB. HDI cannot have it both ways, arguing to the PTAB that prior art “speaker and input device[s]” do not perform processing services, but then arguing before this Court that such hardware components in accused systems do perform processing services. *Southwall Techs.*, 54 F.3d at 1576.

b) The Patents Describe “Processing Services” As Performed “For The Application”

The terms “request for processing service,” “processing service,” and “provide services to an application” require performance “for the application.” The term “provide services to an application,” explicitly requires that “services” are provided to “an application.” Ex. G2, Cl. 11.

The specification confirms that the “services” are provided to the “application.” It describes that the application server executes an application and sends a “request for processing service” to the communication device. Ex. G1 at 1:53–60. The communication device performs the “processing service” for the application to assist with the interaction between the communication device and the remotely executed application. *Id.* at 6:5–10. The claims also all recite that a “request for processing service” is sent to a communication device after the step wherein the application is executed. *See, e.g.*, Ex. G1, Cl. 1, 10, 22; Ex. G2 at 1. HDI’s own description of an “exemplary data flow” of the patents lists the same order of steps, with the application server executing an application and then sending a request for processing to the communication device. Ex. G18 at 6–7.

c) HDI's Proposed Constructions Are Both Under- And Over-Inclusive

HDI's proposal for "processing service" is under-inclusive to the extent it requires "automated operation" and over-inclusive to the extent it covers any "hardware component" including devices, like "dumb" telephones, speakers, and input devices, which HDI explicitly disavowed in its POPRs. *See, e.g.*, Ex. G18 at 4, 19–20; Ex. G20 at 6, 50–52; Ex. G23 at 6, 45.

HDI proposes limiting "processing service" to "automated operation" though the word "automated" does not appear in any of the patents. In fact, the specification gives examples of "processing services" that are not "automated" and instead require user input to the processing service. For instance, the application server may communicate a "voice recognition software program" to "assist client 18a in executing one or more queries associated with the VoiceXML-based application." Ex. G1 at 6:44–48. To perform the "processing service," the communication device needs user voice input. This processing service is thus not an "automated operation."

HDI's attempt to broaden "processing service" to include operation of *any* "hardware component" is improper in light of its disavowal of certain hardware components that merely act as speakers and input devices as discussed above. *See, e.g.*, Ex. G18 at 4, 19–20, 43–45; Ex. G20 at 6, 50–52; Ex. G23 at 6, 45. HDI's proposal for "request for processing service" is problematic for the same reasons because it incorporates HDI's proposal for "processing service." And HDI's proposal of no construction for "provide services to an application" is inconsistent with its own proposal that "processing service" requires construction.

Google's constructions are supported by the intrinsic evidence, while HDI's proposals import a term, "automated," that appears nowhere in the intrinsic record and ignore HDI's own statements to the PTAB in the past two months. For these reasons, the Court should adopt Google's proposed constructions.

8. “a memory . . . that . . . causes the communication device to: establish a communication session to an application server over a first communication link, . . . the application server adapted to execute an application to establish the communication session with the communication device”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
Not indefinite. No construction necessary.	Indefinite under 35 U.S.C. § 112 for failure to inform with reasonable certainty the bounds and scope of the invention.	’937 Patent Cl. 1

Claim 1 of the ’937 Patent is indefinite because it is internally inconsistent—it claims that both the communication device and application server establish the same communication session. Ex. G4, Cl. 1. Inconsistency within a claim renders that claim invalid because it leaves a person of ordinary skill in the art unable to determine the claim’s scope. *See Competitive Techs., Inc. v. Fujitsu Ltd.*, 185 F. App’x 958, 965–66 (Fed. Cir. 2006) (affirming indefiniteness where a claim both “require[d] ISA structures” and “exclude[d] ISA structures.”).

Claim 1 first recites a “communication device, comprising: . . . a memory having stored thereon a software program that . . . causes *the communication device to: . . . establish a communication session.*” Ex. G4, Cl. 1 (emphasis added). The claim also recites the “*application server adapted* to execute an application *to establish the communication session* with the communication device.” *Id.* These limitations are in conflict because the two separate devices, the communication device and the application server, cannot both perform the same step. The internal conflict in the claim renders it indefinite. *See Trustees of Columbia Univ. in City of New York v. Symantec Corp.*, 811 F.3d 1359, 1367 (Fed. Cir. 2016) (finding indefinite “claims [that] describe the step of extracting machine code instructions from something that does not have machine code instructions”).

9. “audio data”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>

“digital representation of an audible signal”	“data for an audible signal”	’032 Patent Cls. 7, 12, 16, 20, 22, 23 ’816 Patent Cls. 6, 18, 19, 20, 24, 25, 27, 28, 29
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HDI’s proposed construction attempts to import the limitation that “audio data” must be “digital” and creates ambiguity by using the term “representation.” Google proposes removing these two words. First, the specification states that “communications links 30, 32, and 34 may comprise communications media capable of assisting in the communication of *analog and/or digital* signals.” Ex. G1 at 5:2–6. The specification states that the communications network of the claimed system may include “a public switched telephone network (PSTN),” which carries analog signals. Ex. G1 at 3:47–53. The claims describe “audio data” as being sent over the “communication link” which, as the specification describes, can carry “analog and/or digital signals.” Ex. G8, Cl. 18. Nothing in the specification or claims indicates that “audio data” should be limited to “digital” signals. Second, the term “representation” injects ambiguity into the term “audio data” as a “representation” of audio data presumably is something broader than audio data itself. But nothing in the patents indicates that “audio data” encompasses representations of audio data, whatever that means. Google’s proposed construction accurately reflects the disclosures in the intrinsic record that include analog and digital data and that describe “audio data” as being audio, not representations of audio.

10. “voice representation”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
“digital representation of a synthesized, audible voice”	“representation of audible voice”	’032 Patent Cls. 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15 ’816 Patent Cls. 1, 6, 7, 8, 9, 10, 11, 12, 27, 28

HDI’s proposed construction for “voice representation” improperly adds the limitations “digital” and “synthesized.” First, as discussed above, the claimed system can send and receive

“*analog and/or digital* signals” over the communication links and “a public switched telephone network (PSTN).” Ex. G1 at 5:2–6, 3:47–53. Claim 1 of the ’816 patent recites the “application server is configured to *transmit the voice representation* and a request for processing service over the first *communication link* to the at least one communication device.” Ex. G8, Cl. 1 (emphasis added). There is no evidence in the patents that “voice representation” should be restricted to only “digital” signals. Second, the word “synthesized” does not appear in any of the Asserted Patents. Construing “voice representation” as only “synthesized” audible voice would improperly exclude “voice representations(s)” made by recording a human voice. For these reasons, Google’s construction, which removes “digital” and “synthesized,” should be adopted.

11. “packetized voice data”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
“digital representation of a voice organized in packets for transmission”	“voice data organized into packets”	’032 Patent Cls. 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15 ’816 Patent Cls. 1, 6, 7, 8, 9, 10, 11, 12, 15, 20, 24, 25, 27, 28, 29

HDI’s proposal for “packetized voice data” as a “representation” and packets “for transmission” does not accurately reflect the meaning of the term. First, as explained for “audio data” in Section IV.9 above, “representation” is overbroad and imprecise and may include things or types of data that “packetized voice data” does not. Second, there is no basis to require that “packetized voice data” is “for transmission.” For instance, a system might “packetize[] voice data” to store the voice data for later retrieval. HDI’s proposal is thus improper, and Google’s construction, which removes these flaws from HDI’s construction, should be adopted.

12. “touch input”

<u>Plaintiff HDI’s Proposal</u>	<u>Defendant Google’s Proposal</u>	<u>Claims</u>
No construction necessary.	“stylus input”	’483 Patent Cl. 16 ’937 Patent Cls. 10, 17 ’732 Patent Cls. 5 ’935 Patent Cl. 8

Google’s proposed construction is supported by the specification and file history, which disclose a “stylus input” as the only form of a “touch input.” The sole embodiment in the specification that explains “touch input” is: “In some embodiments, the user of client 18a can respond through a *DTMF* input, a *voice* input, a *stylus* input, a *keyboard* input, and/or any *other device* capable of receiving a response that is comprehensible to client 18a.” Ex. G1 at 6:55–59 (emphasis added). The specification explains that a “DTMF input” is a form of “audio input,” and not “touch input.” *Id.* at 1:24–27. A “voice input” is plainly not a “touch input.” “[A]ny other device capable of receiving a response that is comprehensible to client” provides no actual written description of a “touch input” or any other input. And during prosecution of the ’483 Patent, HDI relied on the disclosure of “stylus input” to support new claims adding “touch input” limitations that were added as part of new dependent claims. *See* Ex. G9 at 238 (“*As a stylus is a type of touch input and was so at the time of filing, the specification as originally filed supports the dependent claims reciting ‘touch input’.*”). Because “stylus input” was and is the only disclosure of a “touch input” in the specification, “touch input” should be construed to mean “stylus input.” *See Wang Labs., Inc. v. Am. Online, Inc.*, 197 F.3d 1377, 1383 (Fed. Cir. 1999) (holding that a claim term must be limited to the “only embodiment described” in the specification); *see also Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1480 (Fed. Cir. 1998) (“claims may be no broader than the supporting disclosure”); *Kinetic Concepts*, 554 F.3d at 1018–19.

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CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure and Local Rule CV-5, I hereby certify that, on March 13, 2020, all counsel of record who have appeared in this case are being served with a copy of the foregoing via the Court's CM/ECF system.

/s/ Luann L. Simmons

Luann L. Simmons